REMARKS

By way of clarification, it appears that the Examiner has mischaracterized claims 6, 11, 18, 23, 30, 31, 38, 39, and 40, which were previously amended along with claim 1. Although the Examiner examined the limitation provided in an amendment dated May 5, 2006 for claim 1, that "the first and second program descriptor tables are recorded independently of the first and second data unit descriptor tables and the first and second data units," the Examiner did not address this same limitation in amended claims 6, 11, 18, 23, 30, 31, 38, 39, and 40, which were also amended on May 5, 2006. However, it is assumed that the Examiner would use the same reasoning used in rejecting amended claim 1 to reject the remaining amended claims 6, 11, 18, 23, 30, 31, 38, 39, and 40.

Claims 1-40 are currently pending. It is respectfully submitted that the arguments below place claims 1-40 in condition for allowance. No new matter is presented in this Amendment.

REJECTIONS UNDER 35 U.S.C. §103:

Claims 1-40 are rejected under 35 U.S.C. §103(a) as being unpatentable over Lee et al. (U.S. Patent 5,570,340) in view of Ohno (US 5,512,938).

Claim 1

Claim 1 of the instant application claims the following:

"A recording medium on which is recorded a data structure comprising:

first data and second data which are different from each other in type and formed of a respective plurality of data units;

a first data unit descriptor table and a second data unit descriptor table in which information on the first data units and the second data units is respectively recorded as data unit descriptors; and

a first program descriptor table and a second program descriptor table in which information on one or more data units forming respective programs is stored in a program descriptor of a corresponding program in the form of information on respective data unit descriptors, wherein;

the first and second program descriptor tables are recorded independently of the first and second data unit descriptor tables and the first and second data units (emphasis added), and

the information on the first data units, which are to be reproduced after the first data units are linked to the second data units, is included in the program descriptor of the second program descriptor table."

The Examiner rejected claim 1 under 35 U.S.C. §103(a) as obvious over Lee et al. in view of Ohno et al. (US 5,512,938), and supplied the following rationale to make the rejection:

> "[Lee]...fails to disclose that the first and second program descriptor tables are recorded independently of the first and second data unit descriptor tables and the first and second data units. Ohno discloses a system wherein the recorded first and second descriptor tables are shown being recorded independently as seen in video and audio and further recited in Column 9 Lines 10+. The recording of the video and audio independently allows for reproduction of first and second data units (i.e. video and audio units) allowing for generation of new applications linking the two data units. Therefore, it would be obvious to one of ordinary skill in the art to use the recording medium, as disclosed by Lee et al, and further incorporate a system [which] allows independently recording descriptor tables, as recited by Ohno."

As a general matter, in order to establish a *prima facie* obviousness rejection, the Examiner needs to provide both the existence of individual elements corresponding to the recited limitations, and a motivation to combine the individual elements in order to create the recited invention. MPEP 2143. Should the Examiner fail to provide evidence that all of the individual elements or the motivation to combine these elements does not exist in the prior art, then the Examiner has not provided sufficient evidence to maintain a *prima facie* obviousness rejection of the claim. MPEP 2143.03. Thus, the burden is initially on the Examiner to provide evidence as to why one of ordinary skill in the art would have been motivated to combine the individual elements to create the recited invention, and to demonstrate that this evidence existed in the prior art. MPEP 2143.01.

The Prior Art Does Not Disclose, Teach, Or Suggest All Of The Claimed Elements

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. MPEP 2143.03. In this case, the Examiner has failed to show that the prior art teaches or suggests at least the first and second unit descriptor tables and the first and second program descriptor tables, as disclosed by elements (2) and (3) in claim 1 of the instant application, which claim the following:

"a first data unit descriptor table (emphasis added) and a second data unit descriptor table (emphasis added) in which information on the first data units and the second data units is

respectively recorded as data unit descriptors; and

a first program descriptor table (emphasis added) and a second program descriptor table (emphasis added) in which information on one or more data units forming respective programs is stored in a program descriptor of a corresponding program in the form of information on respective data unit descriptors"...

In the Office Action at pages 2-3, the Examiner argues that Lee et al. discloses both the first and second data unit descriptor tables, as well as the first and second program descriptor tables. Specifically, the Examiner argues that Lee et al. discloses a first data unit descriptor table and a second data unit descriptor table as shown in FIG. 3 and described in Col. 6, lines 44-52. FIG. 3 shows a first table area 14 which has a "table having number, start addresses and characteristics data of each first program of first data area 18." Lee et al., Col. 6, lines 60-63. Similarly, FIG. 3 shows a second table area 16 which has a "table having number, start address and characteristics data of each second program of second data area 20." Lee et al. According to the Examiner's argument, these tables in the first and second table areas 14 and 16, respectively, read on the first and second data unit descriptor tables recited in claim 1 of the instant application. The first data unit descriptor tables and the second data unit descriptor tables are recorded in the first table area 14 and the second table area 16, as shown in FIGS. 3-5 and explained by the Examiner in an Office Action mailed August 11, 2005.

However, the Examiner appears to argue that these first unit and second unit descriptor tables are also the first and second program descriptor tables, as recited in claim 1 of the instant application. Specifically, in arguing that Lee et al. discloses first and second program descriptor tables, the Examiner states that "Column 2 Lines 32-44 [of Lee et al.] describes the linking of data units that are included in the second program descriptor table." However, Col. 2, lines 32-44 references "data areas" which are the first and second data areas 18 and 20, respectively, as shown in FIG. 3 of Lee et al. and described in Col. 7, lines 15-48. The only tables mentioned anywhere in Col. 7, lines 15-48 are the first and second tables located in the first and second data areas 14 and 16, respectively, and the "order table" which is shown inside of a first index data 24c, as shown in FIG. 8. The order table is a single table in the second data area 20 which relates information about a plurality of first programs recorded in the first data area 18. Col. 2, lines 32-44.

In contrast, claim 1 of the instant application claims four tables which are all distinct from

each other, including a first data unit descriptor table, a second data unit descriptor table, a first program descriptor table, and a second program descriptor table. Thus, even if the order table located in the second data area 20 constitutes a "second program descriptor table," Lee et al. fails to teach or suggest a first program descriptor table. Thus, Lee et al. does not disclose, teach or suggest the four separate tables claimed in claim 1 of the instant application.

Additionally, Ohno does not disclose, teach or suggest a first and second program descriptor. The transmission video descriptor 400, the transmission audio descriptor 430, and the transmission descriptor 450 described in Col. 9, lines 16 through Col. 11, lines 6 contain descriptors for data (video data, audio data, and transmission data, respectively), not descriptors for programs. As shown in FIG. 4, the transmission video descriptor 400, transmission audio descriptor 430, and transmission descriptor 450 are not arranged as descriptor program tables, but instead are arranged as lists of data, e.g., 1-N video buffer descriptors 401. The data units in FIG. 4 of Ohno do not form programs, unlike the programs formed by the data units in the instant application, as shown in FIG. 5 and described in pgs. 9-10 of the instant application. Thus, Ohno does not disclose, teach or suggest first and second program descriptor tables of claim 1.

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. MPEP 2143.03. Since the Examiner has not demonstrated that the prior art teaches or suggests the first and second unit descriptor tables and the first and second program descriptor tables as recited in of claim 1 in the instant application, it is respectfully submitted that the Examiner has not established a *prima facie* case of obviousness and should withdraw the 35 U.S.C. §103(a) rejection of claim 1 of the instant application for at least this reason.

Ohno Is Not Analogous Art With The Claimed Invention

Furthermore, it is respectfully submitted that Ohno is not analogous art with the invention claimed in the instant application. In order to rely on a reference as a basis for a 35 U.S.C. §103 rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned. MPEP 2141.01(a). Here, Ohno is not in the field of the applicants' endeavor because Ohno discloses a telecommunications terminal for use in the field of telecommunications, whereas the applicants have disclosed a recording medium with an

improved data structure for use in the field of audio/video data recording/reproducing.

Additionally, Ohno is not reasonably pertinent to the particular problem with which the applicants of the instant application are concerned. A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem. MPEP 2141.01(a). Ohno provides a teleconference terminal which can overcome problems such as gaps in the audio signal, and which makes effective use of the hardware and software resources in a PC, reducing the cost and size of the teleconference terminal, as well as allowing for the expansion of the teleconference terminal's storage capacity. Col. 4, lines 15-21. The invention claimed in the instant application is not directed at overcoming gaps in an audio signal, is not directed at reducing the cost and size of a recording medium, and is not directed at allowing for the expansion of storage capacity. Instead, the invention claimed in the instant application is directed at providing a recording medium which can perform an operation in which two types of data are linked, such as audio data and still image video data in a "slideshow" operation. This goal of providing a recording medium which can perform an operation in which two types of data are linked in order to perform such operations as slideshows is not a matter which "logically commends itself" to the problem of developing the improved teleconference terminal claimed in Ohno which overcomes gaps in the audio signal, reduces cost and size, and improves storage capacity.

Since Lee et al. and the invention claimed in the instant application both focus on an improved optical disc recording medium, Lee et al. more likely constitutes analogous art with the invention claimed in the instant application. Ohno, on the other hand, does not focus on an improved optical disc recording medium, nor does Ohno address any problems reasonably pertinent to the particular problem with which the applicants of the instant application are concerned with, or the problems addressed by the inventors of the improved optical disc recording medium of Lee et al. Ohno therefore should not qualify as analogous art with either Lee et al. or the invention claimed in the instant application. Although Ohno does in fact disclose video and audio data units, this disclosure by itself does not automatically make Ohno analogous to either Lee et al. or the invention claimed in the instant application; otherwise, any reference mentioning video and audio data, regardless of how remote the reference, could qualify as analogous art. Thus, it is respectfully submitted that the Examiner should withdraw Ohno as a reference under 35 U.S.C. §103(a) because Ohno is not analogous art with the

invention disclosed in the instant application.

The Examiner Has Not Demonstrated A Motivation To Combine Lee With Ohno

It is further respectfully submitted that the Examiner has failed to provide a motivation to combine the individual elements from the prior art to arrive at applicants' claimed invention. In order to establish a *prima facie* case for obviousness, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. MPEP 2143. The initial burden is on the Examiner to provide some suggestion of the desirability of doing what the inventor has done. MPEP 2142.

In the Examiner's rejection of claim 1 under 35 U.S.C. §103(a), the Examiner argues that:

> "Therefore, it would be obvious to one of ordinary skill in the art to use the recording medium, as disclosed by Lee et al., and further incorporate a system which allows independently recording descriptor tables, as recited by Ohno."

By way of review, Ohno provides a teleconference terminal connected to other such terminals located at remote points by a network, which can inter-communicatively execute teleconferencing by transmitting audio and video information in a multiplex format using line switching on an ISDN line. Col. 1, lines 6-12. Ohno is directed at fixing a problem with teleconference terminals in the related art, because these older teleconference terminals require the user to connect a general use PC to an AV unit 170 separate from the PC 110 which cannot be directly connected to the computer bus in the PC 110, resulting in teleconference systems with high cost, difficulties regarding reduction in scale, and poor potential for expansion. Col. 3, lines 28-26. Ohno fixes this problem in the related art by providing a teleconference terminal which uses a personal computer for sending and receiving video code, audio code and data to and from another teleconference terminal, using an ISDN line switching method, and thereby providing a teleconference terminal which uses the PC's software resources more effectively. Col. 4, lines 22-26; Col. 5, lines 5-17.

In contrast, Lee et al. is directed at providing a disk recording medium for recording a large quantity of programs and enabling data accessing at a micro-computer level without a specific operating system or application program. Col. 2, lines 11-15. Unlike Ohno, which is directed at using software resources more effectively by adding an AV unit inside a PC, and then

housing both of these components inside a teleconference terminal, Lee et al. is intended to remove a separate operating system or application program from a disc recording/reproducing apparatus. One skilled in the art would not be motivated to combine the independent recording descriptor tables of Ohno with the disk recording medium of Lee et al. because the two inventions are intended to be used for different purposes.

Furthermore, although FIG. 4 of Ohno does depict first and second data units, e.g., video code 405 and audio code 441, recorded independently from first and second "descriptor" tables, e.g., transmission video descriptor 400 and transmission audio descriptor 430, FIG. 4 does not depict any linkage between the first and second "descriptor" tables. Instead, FIG.4, along with FIG. 5, shows a clear absence of linkage between any of the descriptor tables, because Ohno is not directed towards simultaneous recording and/or reproduction of independently created data units (e.g., a slideshow operation). Lee et al., on the other hand, clearly depicts in FIG. 8 an "order table" (i.e., descriptor table) recorded within (i.e., not independently of) the body 24 of a second data area, because Lee et al. is concerned with relating the index data 24c stored in the order table, which pertains to first programs, to the second data area. The initial burden is on the Examiner to provide some suggestion of the desirability of doing what the inventor has done. MPEP 2142. In this case, the Examiner has not provides why one skilled in the art would find any motivation to combine the unlinked descriptor tables of Ohno with the linked descriptor tables of Lee et al., because Ohno does not teach or suggest the desirability of linkage, and Lee et al. does not teach or suggest the desirability of an absence of linkage.

Increasing access to the contents of a CI-I disc (the goal of Lee et al.) has nothing to do with overcoming gaps in an audio signal, reducing the cost and size of a recording medium, or allowing for the expansion of the recording medium's capacity. Consequently, one skilled in the art would have no reason to combine Lee et al. with Ohno. There must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine Lee with Ohno, and in this case, no such motivation exists. MPEP 2143.

Dependent claims 2-5, which depend on independent claim 1, are deemed patentable for at least the same reasons as above.

Claims 6-40

Since the remaining independent claims 6, 11, 18, 23, 30, 31, 38, 39, and 40 are also all

rejected under 35 U.S.C. §103(a) as being unpatentable by Lee et al. in view of Ohno, these remaining independent claims and all the dependent claims depending on these independent claims are deemed patentable for at least the same reasons as claim 1 is deemed patentable.

Based on the foregoing, this rejection is respectfully requested to be withdrawn.

CONCLUSION:

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 503333.

Respectfully submitted,

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